



wartyback

Quadrula nodulata

Kingdom: Animalia
Division/Phylum: Mollusca
Class: Bivalvia

Features

The wartyback mussel shell is relatively thick, rounded, and “inflated.” The anterior end is rounded and the posterior is squared. There are two rows of knobs (which usually occur in pairs) extending from the hinge down the sides and there may be small ridges extending down the sides of the shell. The shell is a uniform yellowish green or light brown and becomes darker with age. The inside of the shell is a pearly white and is iridescent near the posterior end. The wartyback may reach three inches long.

Natural History

The wartyback is found in large rivers or the lower reaches of medium-sized rivers in sand or fine gravel. Freshwater mussel distribution in Iowa is not well documented. They have an elaborate reproductive system. During spawning, males release sperm into the water. The sperm are drawn inside the female's shell, where they fertilize eggs in her body. The fertilized eggs develop into larvae (glochidia) and are stored for a time in the female's gills. When the glochidia mature, the female generally expels them into the water where they must attach as parasites to

the gills or fins of fish. Larvae remain on the host fish for a period of weeks or months. Young mussels then detach from their host and drop to the bottom of the body of water. Hosts for this mussel include several common fish. Mussels are filter-feeders, bringing in water and the organic matter it contains through the incurrent siphon, filtering the particles out, then sending the rest of the water away from the body through the excurrent siphon. Particles filtered include plankton and detritus. Mature mussels spend most of their lives, which range from 10 to 100 years, partially or wholly buried in the bottom substrate.

Habitats

Mississippi River, interior rivers and streams

Iowa Status

common; native

Iowa Range

Mississippi River and possibly lower reaches of its large tributaries

Bibliography

Iowa Department of Natural Resources. 2001.
Biodiversity of Iowa: Aquatic Habitats CD-ROM.